Specialists Group on Coding for Visual Telephony

SOURCE: VideoTelecom, Bellcore, AT&T, PictureTel, CLI
TITLE: USA Flexible Hardware Status

VideoTelecom, PictureTel and CLI are each developing video codecs for the flexible hardware field trials. These codecs have an RS-449 interface, which connects to the communication hardware being developed by AT&T and Bellcore.

Some compatibility tests have been performed using the H.261 portion of the codec only. H.221 and FEC framing have not been field tested at this time. The following tests have been performed:

DATE	ORGANIZATIONS	LOCATIONS
9/28/89	VideoTelecom, Bellcore	Austin, Livingston
10/24/89	PictureTel, VideoTelecom	Peabody, Austin
10/25/89	PictureTel, VideoTelecom	San Jose
10/31/89	PictureTel, British Telecom	Peabody, Ipswitch U.K.
11/01/89	PictureTel, VideoTelecom	Peabody, Austin
11/03/89	PictureTel, VideoTelecom	Peabody, Austin

The individual company's status reports follow:

VIDEOTELECOM

VideoTelecom's flexible hardware system is currently operating with QCIF resolution. Motion compensation has been integrated into both the encoder and the decoder. The system has been successfully tested at video data rates from 56 Kbps to 168 Kbps.

BELLCORE

The H.221 software has been completed and integrated with AT&T's interfacing software. The code has been tested at 70 Kbps on a 16 MHz 386 machine, and 84 Kbps on a 20 MHz 386 machine.

AT&T BELL LABS

The RS-449 interface to the codec is operational at 64 Kbps. Programs have been developed to loopback to the codec at the RS-

449 interface, or after going through the H.221 code. A record and playback feature has been implemented so that video data can be captured from the codec, stored in a disk file, and played back through the codec. Work is currently being done on integrating the ISDN interface.

PICTURETEL

PictureTel's flexible hardware system operates at QCIF resolution. It has been tested with with VideoTelcom's system at 56 and 112 Kbps. It has also been tested with British Telecom's system at 56 Kbps.

CLI

CLI is currently developing the software for the flexible hardware system.